

K072779

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**510(k) SUMMARY**

**Biolitec Inc.'s  
Ceralas Diode 980nm Laser System (Models D15, D25)**

**Submitter's Name, Address, Telephone Number, Contact Person  
and Date Prepared**

Hogan & Hartson  
555 13<sup>th</sup> Street NW  
Washington DC 20004

JAN 24 2008

Phone: (202) 637-5794  
Facsimile: (202) 637-5910

Contact Person: Jonathan S. Kahan

Date Prepared: January 18, 2008

**Name of Device and Name/Address of Sponsor**

Ceralas D 980nm Diode Laser (Models D15, D25)

Biolitec, Inc.  
515 Shaker Road  
East Longmeadow, MA 01028

**Common or Usual Name**

Diode Laser

**Classification Number/Name**

878.4810 Laser, Surgical Diode Laser System

**Product Code**

GEX

**Predicate Devices**

Ceralas Diode Laser System (Model D) (K993911)  
Ceralas D 980nm Diode Laser (Models D15, D25) (K032863)  
Cynosure SmartLipo Laser Nd:YAG Laser System (K062321)

Ceralas Diode Laser System (Model D15) (K983058)  
Ceralas Diode Laser System (Model D15) (K991891)  
Ceralas Diode Laser System (Model D15) (K993002)  
Ceralas Diode Laser Systems (Model D15) (K964497)

### **Intended Use / Indications for Use**

The Ceralas D 980 is intended for delivery of laser light to soft tissue in the contact or non-contact mode during surgical procedures, including via endoscopes, introducers, or catheters. The Ceralas D 980 is generally indicated for incision, excision, vaporization, ablation, hemostasis, or coagulation of soft tissue in ear, nose and throat and oral surgery (otolaryngology), dental procedures, arthroscopy, gastroenterology, general surgery, dermatology, plastic surgery, podiatry, urology, gynecology, neurosurgery (peripheral nervous system), pulmonary surgery, and cardiothoracic surgery. This Ceralas D 980 is specifically indicated for hemostasis and coagulation of soft tissue (including cardiac tissue) and laser assisted lipolysis.

### **Specific Indications for Use**

#### **Ear, Nose and Throat and Oral Surgery:**

Hemostasis, incision, excision, ablation, coagulation, and vaporization of tissue from the ear, nose, throat and adjacent areas including soft tissue in the oral cavity. Examples include:

- Removal of benign lesions from the ear, nose and throat
- Excision and vaporization of vocal cord nodules and polyps
- Incision and excision of carcinoma in situ
- Ablation and vaporization of hyperkeratosis
- Excision of carcinoma of the larynx
- Laryngeal papillomectomy
- Excision and vaporization of herpes simplex I and II
- Neck dissection
- Tonsillectomy
- Thyroidectomy
- Vocal cord polypectomy
- Hemiglossectomy
- Tracheal stenosis
- Oral cavity lesions

### Dental Applications:

Intraoral and extraoral soft tissue (including marginal and interdental gingiva and epithelial lining of free gingiva). Examples include:

- Frenectomy
- Frenotomy
- Biopsy
- Operculectomy
- Implant recovery
- Gingivectomy
- Gingivoplasty
- Gingival troughing
- Crown lengthening
- Hemostasis of donor site
- Removal of granulation tissue
- Laser assisted flap surgery
- Debridement of diseased epithelial lining
- Incisions and draining of abscesses
- Tissue retraction for impressions
- Papillectomy
- Vestibuloplasty
- Excision of lesions
- Exposure of unerupted/partially erupted teeth
- Leukoplakia
- Removal of hyperplastic tissues
- Treatment of aphthous ulcers
- Sulcular debridement (removal of diseased or inflamed soft tissue in the periodontal pocket)
- Pulpotomy
- Pulpotomy as an adjunct to root canal therapy
- Light activation of bleaching materials for teeth whitening

### Arthroscopy:

Hemostasis, incision, excision, coagulation, vaporization and ablation of joint tissues during arthroscopic surgery. Examples include:

- Menisectomy
- Synovectomy
- Chondromalacia

### Gastroenterology:

Hemostasis, incision, excision, ablation, coagulation and vaporization of tissue in the upper and lower gastrointestinal tracts and also with endoscopic procedures.

Examples include:

- Hemostasis of upper and lower GI bleeding
- Excision and vaporization of colorectal carcinoma
- Excision of polyps

### General Surgery, Dermatology, Plastic Surgery and Podiatry:

Excision, ablation, vaporization and photocoagulation of skin lesions, hemostasis, incision, excision, vaporization, ablation and debulking of soft tissue, abdominal, rectal, skin, fat or muscle tissue and dermabrasion. Examples include:

- Matrixectomy
- Excision of neuromas
- Excision of periungual and subungual warts
- Excision of plantar warts
- Excision of keloids
- Liver resection
- Excision of cutaneous lesions
- Hemorrhoidectomy
- Appendectomy
- Debridement of decubitus ulcers
- Hepatobiliary tumors
- Mastectomy
- Dermabrasion
- Vaporization and hemostasis of capillary hemangioma
- Excision, vaporization and hemostasis of abdominal tumors
- Excision, vaporization and hemostasis of rectal pathology
- Pilonidal cystectomy
- Hernioraphy
- Adhesiolysis
- Parathyroidectomy
- Laparoscopic cholecystectomy
- Thyroidectomy
- Resection of organs
- Debridement of wounds
- Photocoagulation of teleangiectasia of the legs and face
- Photocoagulation of vascular lesions of the face and extremities

### Urology:

Excision, vaporization, incision, coagulation, ablation and hemostasis of urological tissues. Examples include:

- Vaporization of urethral tumors
- Release of urethral stricture
- Removal of bladder neck obstruction
- Excision and vaporization of condyloma
- Lesions of external genitalia

### Gynecology:

Ablation, excision, incision, coagulation, hemostasis and vaporization of gynecological tissue. Examples include:

- Endometrial ablation
- Excision or vaporization of condylomata acuminata
- Vaporization of cervical intraepithelial neoplasia
- Cervical conization
- Menorrhagia

### Neurosurgery:

Vaporization, coagulation, excision, incision, ablation and hemostasis of soft tissue. Example includes:

Hemostasis in conjunction with meningiomas

### Pulmonary Surgery:

Hemostasis, vaporization, coagulation, incision, excision and ablation of soft tissue in the pulmonary system. Examples include:

- Tracheobronchial malignancy or stricture
- Benign and malignant pulmonary obstruction
- Endoscopic pulmonary applications

### Cardiothoracic Surgery:

Incision, excision, vaporization, ablation, hemostasis, or coagulation of soft tissue, including cardiac tissues.

### Laser Assisted Lipolysis

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### **Technological Characteristics**

The Ceralas D 980 for laser assisted lipolysis has the same technological characteristics as the cleared Ceralas and substantially similar technological characteristics as compared to the Cynosure SmartLipo laser.

### **Performance Data**

No performance data is being submitted.

### **Substantial Equivalence**

The Ceralas D is as safe and effective as Biolitec's cleared Ceralas Diode Laser System (K964497, K993911, K032863, K983058, K991891, K993002), as well as the Cynosure SmartLipo Laser Nd:YAG Laser System (K062321). The Ceralas D has the same intended uses and similar indications, technological characteristics, and principles of operation as its predicate devices. The minor technological differences between the Ceralas D and its predicate devices raise no new issues of safety or effectiveness. Thus, the Ceralas D is substantially equivalent.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

JAN 24 2008

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Biolitec, Inc.  
% Hogan and Hartson, LLP  
Mr. Jonathan S. Kahan  
Columbia Square  
555 Thirteenth Street, Northwest  
Washington, District of Columbia 20004

Re: K072779

Trade/Device Name: Ceralas D 980nm Diode Laser System (Models D15, D25)  
Regulation Number: 21 CFR 878.4810  
Regulation Name: Laser surgical instrument for use in general and plastic surgery and  
in dermatology  
Regulatory Class: II  
Product Code: GEX  
Dated: December 28, 2007  
Received: December 28, 2007

Dear Mr. Kahan:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set

forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Center for Devices and Radiological Health's (CDRH's) Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at (240) 276-3474. For questions regarding the reporting of device adverse events (Medical Device Reporting (MDR)), please contact the Division of Surveillance Systems at (240) 276-3464. You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Mark N. Melkerson  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure



## Indications for Use Statement

510(k) Number (if known): K072779

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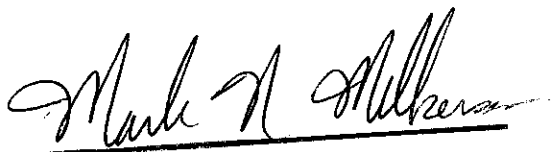
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- Oral cavity lesions

  
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 Division of General, Restorative,  
 and Neurological Devices

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Dental Applications:

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### Gastroenterology:


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**Urology:**

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**Neurosurgery:**

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**Pulmonary Surgery:**

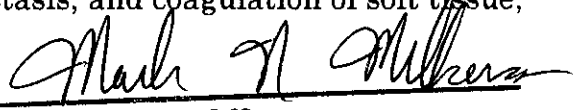
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**Cardiothoracic Surgery:**

Incision, excision, vaporization, ablation, hemostasis, and coagulation of soft tissue, including cardiac tissues.

**Laser Assisted Lipolysis**

  
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Prescription Use   X    
(Part 21 C.F.R. 801 Subpart D)

AND/OR

Over-The-Counter Use         
(21 C.F.R. 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE -- CONTINUE ON ANOTHER  
PAGE IF NEEDED)

\_\_\_\_\_  
Concurrence of CDRH, Office of Device Evaluation (ODE)



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